Bringing UK averages into the 21st Century

29 August 2012 - The Met Office long-term UK climate averages have leapt forward a decade into the 21st Century to give the most up-to-date picture of our climate today, as well as an insight into how it has changed.

These 30-year averages are a standard way of assessing climate, providing a benchmark for a 'normal' month, season or year across all parts of the UK. They are updated as soon as possible after the end of each decade.

The 1981-2010 averages have just been released, adding to the existing 1971-2000 and 1961-1990 averages. In future the monthly, seasonal and annual climate summaries for the UK will use these new 1981-2010 records as the benchmark period.

Figures for 1981-2010 show that the UK's annual mean temperature is 8.84 °C, and that we get 1154 mm of rain and have 1373 hours of sunshine on average each year. By looking at how these values have changed compared to previous 30-year averages, we can see some interesting trends.

Higher temperatures consistent with global increases

Temperature shows the most marked change, with the UK annual mean temperature being 0.25 °C higher for the 1981-2010 period compared to 1971-2000, or 0.52 °C if compared to 1961-1990.

Mike Kendon of the Met Office National Climate Information Centre said: "At a regional level and for individual seasons we expect variability on decadal timescales, from natural cycles, to play a role. Nevertheless, the increases in UK annual mean temperature are consistent with the trend in warming observed globally over land."

Other variables related to temperature show consistent trends - with the annual average number of days of air frost and snow lying having decreased for the 1981-2010 figures compared to the previous two periods.

More rain, but also sunnier

Rainfall has also increased - by 2% annually compared to the 1971-2000 period, or 5% on the 1961-1990 period. As with temperature, these figures mask regional and seasonal variations associated with natural variations on decadal timescales. However, the increase in rainfall is consistent with the annual warming trend.

Peter Stott, Head of Climate Monitoring and Attribution at the Met Office, said: "The increase in rainfall may be partly explained by the fact that a warmer atmosphere can hold more moisture, so we may be seeing heavier rain when it falls.

"Globally we have seen an increase in heavy rainfall, but more research needs to be done to be clear on how a warming atmosphere and variations in weather patterns may be affecting averages in the UK's regional climate."

The UK was also a slightly sunnier place in 1981-2010 compared to 1971-2000, with 18 extra hours of sunshine annually or, looking back to 1961-1990, an extra 35 hours (about a 3% increase on the 1961-1990 period).

The new statistics are presented in maps of the UK and in tables for weather stations, regions and countries, revealing a wealth of detail. These are open for all to explore on the climate pages on the Met Office website.

As the UK's national meteorological service the Met Office holds the official weather and climate records for the UK on behalf of the nation. These historic climate records and series are used to monitor the climate of the UK at a national and regional level.

Contact details

Members of the media can email: pressoffice@metoffice.gov.uk or call us on +44 (0)1392 886655*.

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Last updated: 29 August 2012